



SEQUENCE LISTING

<110> Stefan Bauer
Grayson B. Lipford
Hermann Wagner

<120> PROCESS FOR HIGH THROUGHPUT SCREENING OF
CpG-BASED IMMUNO-AGONIST/ANTAGONIST

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<141> 2001-09-17

<150> US 60/233,035

<151> 2000-09-15

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<151> 2001-01-23

<150> US 60/291,726

<151> 2001-05-17

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<151> 2001-06-22

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Asn	Phe	Ile	Asn	Gln	Ala	Gln	Leu	Gly	Ile	Phe	Arg	Ala	Phe	Pro	Gly
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Leu	Thr	Ala	Thr	Met	Gly	Glu	Ala	Asp	Gly	Gly	Glu	Lys	Val	Trp	Leu
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Gln	Pro	Gly	Asp	Leu	Ala	Pro	Ala	Pro	Val	Asp	Thr	Pro	Ser	Ser	Glu
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Arg	Asn	Asn	Leu	Val	Thr	Val	Gln	Pro	Glu	Met	Phe	Ala	Gln	Leu	Ser
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His	Leu	Gln	Cys	Leu	Arg	Leu	Ser	His	Asn	Cys	Ile	Ser	Gln	Ala	Val
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Glu	Ala	Thr	Pro	Glu	Glu	Ala	Asp	Asp	Ala	Glu	Gln	Glu	Glu	Leu	Leu
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Ser	Ala	Asp	Pro	His	Pro	Ala	Pro	Leu	Ser	Thr	Pro	Ala	Ser	Lys	Asn
	115				120						125				
Phe	Met	Asp	Arg	Cys	Lys	Asn	Phe	Lys	Phe	Asn	Met	Asp	Leu	Ser	Arg
	130				135					140					
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tcgcacatag	cgggacggtn	gggcatccgg	acgcaggatc	accaacacca	ccacgtcctt	420
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 35 40 45
 Arg Leu Cys Arg Gln Ser Val Leu Phe Trp Pro Gln Arg Pro Asn Gly
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 35 40 45
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 Pro Asp Ala His Arg Ser Arg Tyr Val Arg Leu Arg Gln Arg Leu Cys
 65 70 75 80
 Arg Gln Ser Val Leu Phe Trp Pro Gln Gln Pro Asn Gly Gln Gly Gly
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			20					25					30		
Asp	Ile	His	Thr	Arg	Val	Ser	Ser	His	Leu	Asn	Ser	Asn	Ser	Val	Arg
		35					40					45			
Phe	Leu	Asp	Phe	Ser	Gly	Asn	Gly	Met	Gly	Arg	Met	Trp	Asp	Glu	Gly
	50					55					60				
Gly	Leu	Tyr	Leu	His	Phe	Phe	Gln	Gly	Leu	Ser	Gly	Val	Leu	Lys	Leu
65					70					75				80	
Asp	Leu	Ser	Gln	Asn	Asn	Leu	His	Ile	Leu	Arg	Pro	Gln	Asn	Leu	Asp
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Asn	Leu	Pro	Lys	Ser	Leu	Lys	Leu	Leu	Ser	Leu	Arg	Asp	Asn	Tyr	Leu
			100					105					110		
Ser	Phe	Phe	Asn	Trp	Thr	Ser	Leu	Ser	Phe	Leu	Pro	Asn	Leu	Glu	Val
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Leu	Asp	Leu	Ala	Gly	Asn	Gln	Leu	Lys	Ala	Leu	Thr	Asn	Gly	Thr	Leu
	130					135					140				
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gctacggccc	tgcagctggc	cggggctgcc	acacttcaca	ccattagcca	ggccaggcac	360
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 Asp Glu Val Leu Ser Trp Asp Cys Phe Gly Leu Ser Leu Leu Ala Val
 65 70 75 80
 Ala Val Gly Met Val Val Pro Ile Leu His Leu Cys Gly Trp Asp
 85 90 95
 Val Trp Tyr Cys Phe His Leu Cys Leu Ala Trp Leu Pro Leu Leu Ala
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 Arg Ser Arg Arg Ser Ala Gln Thr Leu Pro Tyr Asp Ala Phe Val Val
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<211> 3147

<212> DNA

<213> Homo sapiens

<220>

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<222> (0)...(0)

<223> Human TLR7 ORF

<400> 169

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<210> 170

<211> 1049

<212> PRT

<213> Homo sapiens

<400> 170

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Thr	Leu	Pro	Cys	Asp	Val	Thr	Leu	Asp	Val	Pro	Lys	Asn	His	Val	Ile
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Val	Asp	Cys	Thr	Asp	Lys	His	Leu	Thr	Glu	Ile	Pro	Gly	Gly	Ile	Pro
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Thr	Asn	Thr	Thr	Asn	Leu	Thr	Leu	Thr	Ile	Asn	His	Ile	Pro	Asp	Ile
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Ser	Pro	Ala	Ser	Phe	His	Arg	Leu	Asp	His	Leu	Val	Glu	Ile	Asp	Phe
				85					90					95	
Arg	Cys	Asn	Cys	Val	Pro	Ile	Pro	Leu	Gly	Ser	Lys	Asn	Asn	Met	Cys
			100					105					110		
Ile	Lys	Arg	Leu	Gln	Ile	Lys	Pro	Arg	Ser	Phe	Ser	Gly	Leu	Thr	Tyr
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Leu	Lys	Ser	Leu	Tyr	Leu	Asp	Gly	Asn	Gln	Leu	Leu	Glu	Ile	Pro	Gln
	130					135					140				
Gly	Leu	Pro	Pro	Ser	Leu	Gln	Leu	Leu	Ser	Leu	Glu	Ala	Asn	Asn	Ile
145					150					155					160
Phe	Ser	Ile	Arg	Lys	Glu	Asn	Leu	Thr	Glu	Leu	Ala	Asn	Ile	Glu	Ile
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Leu	Tyr	Leu	Gly	Gln	Asn	Cys	Tyr	Tyr	Arg	Asn	Pro	Cys	Tyr	Val	Ser
			180					185					190		
Tyr	Ser	Ile	Glu	Lys	Asp	Ala	Phe	Leu	Asn	Leu	Thr	Lys	Leu	Lys	Val
	195					200						205			
Leu	Ser	Leu	Lys	Asp	Asn	Asn	Val	Thr	Ala	Val	Pro	Thr	Val	Leu	Pro
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Ser	Thr	Leu	Thr	Glu	Leu	Tyr	Leu	Tyr	Asn	Asn	Met	Ile	Ala	Lys	Ile
225					230					235					240
Gln	Glu	Asp	Asp	Phe	Asn	Asn	Leu	Asn	Gln	Leu	Gln	Ile	Leu	Asp	Leu
				245					250					255	
Ser	Gly	Asn	Cys	Pro	Arg	Cys	Tyr	Asn	Ala	Pro	Phe	Pro	Cys	Ala	Pro
			260					265					270		
Cys	Lys	Asn	Asn	Ser	Pro	Leu	Gln	Ile	Pro	Val	Asn	Ala	Phe	Asp	Ala
	275					280						285			
Leu	Thr	Glu	Leu	Lys	Val	Leu	Arg	Leu	His	Ser	Asn	Ser	Leu	Gln	His
	290					295					300				

Val	Pro	Pro	Arg	Trp	Phe	Lys	Asn	Ile	Asn	Lys	Leu	Gln	Glu	Leu	Asp
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Leu	Ser	Gln	Asn	Phe	Leu	Ala	Lys	Glu	Ile	Gly	Asp	Ala	Lys	Phe	Leu
				325					330					335	
His	Phe	Leu	Pro	Ser	Leu	Ile	Gln	Leu	Asp	Leu	Ser	Phe	Asn	Phe	Glu
			340					345					350		
Leu	Gln	Val	Tyr	Arg	Ala	Ser	Met	Asn	Leu	Ser	Gln	Ala	Phe	Ser	Ser
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Leu	Lys	Ser	Leu	Lys	Ile	Leu	Arg	Ile	Arg	Gly	Tyr	Val	Phe	Lys	Glu
	370				375						380				
Leu	Lys	Ser	Phe	Asn	Leu	Ser	Pro	Leu	His	Asn	Leu	Gln	Asn	Leu	Glu
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Val	Leu	Asp	Leu	Gly	Thr	Asn	Phe	Ile	Lys	Ile	Ala	Asn	Leu	Ser	Met
				405					410					415	
Phe	Lys	Gln	Phe	Lys	Arg	Leu	Lys	Val	Ile	Asp	Leu	Ser	Val	Asn	Lys
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Ile	Ser	Pro	Ser	Gly	Asp	Ser	Ser	Glu	Val	Gly	Phe	Cys	Ser	Asn	Ala
		435					440					445			
Arg	Thr	Ser	Val	Glu	Ser	Tyr	Glu	Pro	Gln	Val	Leu	Glu	Gln	Leu	His
	450					455					460				
Tyr	Phe	Arg	Tyr	Asp	Lys	Tyr	Ala	Arg	Ser	Cys	Arg	Phe	Lys	Asn	Lys
465					470					475					480
Glu	Ala	Ser	Phe	Met	Ser	Val	Asn	Glu	Ser	Cys	Tyr	Lys	Tyr	Gly	Gln
				485					490					495	
Thr	Leu	Asp	Leu	Ser	Lys	Asn	Ser	Ile	Phe	Phe	Val	Lys	Ser	Ser	Asp
			500					505					510		
Phe	Gln	His	Leu	Ser	Phe	Leu	Lys	Cys	Leu	Asn	Leu	Ser	Gly	Asn	Leu
		515					520					525			
Ile	Ser	Gln	Thr	Leu	Asn	Gly	Ser	Glu	Phe	Gln	Pro	Leu	Ala	Glu	Leu
	530					535					540				
Arg	Tyr	Leu	Asp	Phe	Ser	Asn	Asn	Arg	Leu	Asp	Leu	Leu	His	Ser	Thr
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Ala	Phe	Glu	Glu	Leu	His	Lys	Leu	Glu	Val	Leu	Asp	Ile	Ser	Ser	Asn
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Ser	His	Tyr	Phe	Gln	Ser	Glu	Gly	Ile	Thr	His	Met	Leu	Asn	Phe	Thr
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Lys	Asn	Leu	Lys	Val	Leu	Gln	Lys	Leu	Met	Met	Asn	Asp	Asn	Asp	Ile
	595						600					605			
Ser	Ser	Ser	Thr	Ser	Arg	Thr	Met	Glu	Ser	Glu	Ser	Leu	Arg	Thr	Leu
	610					615					620				
Glu	Phe	Arg	Gly	Asn	His	Leu	Asp	Val	Leu	Trp	Arg	Glu	Gly	Asp	Asn
625					630					635					640
Arg	Tyr	Leu	Gln	Leu	Phe	Lys	Asn	Leu	Leu	Lys	Leu	Glu	Glu	Leu	Asp
				645					650					655	
Ile	Ser	Lys	Asn	Ser	Leu	Ser	Phe	Leu	Pro	Ser	Gly	Val	Phe	Asp	Gly
			660					665					670		
Met	Pro	Pro	Asn	Leu	Lys	Asn	Leu	Ser	Leu	Ala	Lys	Asn	Gly	Leu	Lys
		675					680					685			
Ser	Phe	Ser	Trp	Lys	Lys	Leu	Gln	Cys	Leu	Lys	Asn	Leu	Glu	Thr	Leu
	690					695					700				
Asp	Leu	Ser	His	Asn	Gln	Leu	Thr	Thr	Val	Pro	Glu	Arg	Leu	Ser	Asn
705					710					715					720
Cys	Ser	Arg	Ser	Leu	Lys	Asn	Leu	Ile	Leu	Lys	Asn	Asn	Gln	Ile	Arg
				725					730					735	
Ser	Leu	Thr	Lys	Tyr	Phe	Leu	Gln	Asp	Ala	Phe	Gln	Leu	Arg	Tyr	Leu
			740					745				750			
Asp	Leu	Ser	Ser	Asn	Lys	Ile	Gln	Met	Ile	Gln	Lys	Thr	Ser	Phe	Pro
	755						760					765			
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770		775		780											
Phe	Leu	Cys	Thr	Cys	Asp	Ala	Val	Trp	Phe	Val	Trp	Trp	Val	Asn	His
785					790					795					800
Thr	Glu	Val	Thr	Ile	Pro	Tyr	Leu	Ala	Thr	Asp	Val	Thr	Cys	Val	Gly
				805					810					815	
Pro	Gly	Ala	His	Lys	Gly	Gln	Ser	Val	Ile	Ser	Leu	Asp	Leu	Tyr	Thr
			820					825					830		
Cys	Glu	Leu	Asp	Leu	Thr	Asn	Leu	Ile	Leu	Phe	Ser	Leu	Ser	Ile	Ser
		835					840					845			
Val	Ser	Leu	Phe	Leu	Met	Val	Met	Met	Thr	Ala	Ser	His	Leu	Tyr	Phe
	850					855					860				
Trp	Asp	Val	Trp	Tyr	Ile	Tyr	His	Phe	Cys	Lys	Ala	Lys	Ile	Lys	Gly
865					870					875					880
Tyr	Gln	Arg	Leu	Ile	Ser	Pro	Asp	Cys	Cys	Tyr	Asp	Ala	Phe	Ile	Val
			885					890						895	
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		900					905					910			
Val	Ala	Lys	Leu	Glu	Asp	Pro	Arg	Glu	Lys	His	Phe	Asn	Leu	Cys	Leu
	915						920					925			
Glu	Glu	Arg	Asp	Trp	Leu	Pro	Gly	Gln	Pro	Val	Leu	Glu	Asn	Leu	Ser
	930					935				940					
Gln	Ser	Ile	Gln	Leu	Ser	Lys	Lys	Thr	Val	Phe	Val	Met	Thr	Asp	Lys
945					950					955					960
Tyr	Ala	Lys	Thr	Glu	Asn	Phe	Lys	Ile	Ala	Phe	Tyr	Leu	Ser	His	Gln
			965					970						975	
Arg	Leu	Met	Asp	Glu	Lys	Val	Asp	Val	Ile	Ile	Leu	Ile	Phe	Leu	Glu
		980						985					990		
Lys	Pro	Phe	Gln	Lys	Ser	Lys	Phe	Leu	Gln	Leu	Arg	Lys	Arg	Leu	Cys
	995						1000				1005				
Gly	Ser	Ser	Val	Leu	Glu	Trp	Pro	Thr	Asn	Pro	Gln	Ala	His	Pro	Tyr
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Phe	Trp	Gln	Cys	Leu	Lys	Asn	Ala	Leu	Ala	Thr	Asp	Asn	His	Val	Ala
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<210> 171
 <211> 989
 <212> PRT
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<400> 171
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Thr Leu Pro Cys Asp Val Thr Leu Asp Val Pro Lys Asn His Val Ile
35 40 45
Val Asp Cys Thr Asp Lys His Leu Thr Glu Ile Pro Gly Gly Ile Pro
50 55 60
Thr Asn Thr Thr Asn Leu Thr Leu Thr Ile Asn His Ile Pro Asp Ile
65 70 75 80
Ser Pro Ala Ser Phe His Arg Leu Asp His Leu Val Glu Ile Asp Phe
85 90 95
Arg Cys Asn Cys Val Pro Ile Pro Leu Gly Ser Lys Asn Asn Met Cys
100 105 110
Ile Lys Arg Leu Gln Ile Lys Pro Arg Ser Phe Ser Gly Leu Thr Tyr
115 120 125
Leu Lys Ser Leu Tyr Leu Asp Gly Asn Gln Leu Leu Glu Ile Pro Gln

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Phe	Ser	Ile	Arg	Lys 165	Glu	Asn	Leu	Thr	Glu 170	Leu	Ala	Asn	Ile	Glu	Ile 175	
Leu	Tyr	Leu	Gly 180	Gln	Asn	Cys	Tyr	Tyr	Arg 185	Asn	Pro	Cys	Tyr	Val	Ser 190	
Tyr	Ser	Ile	Glu 195	Lys	Asp	Ala	Phe	Leu	Asn 200	Leu	Thr	Lys	Leu	Lys	Val 205	
Leu	Ser	Leu	Lys	Asp	Asn	Asn	Val	Thr	Ala	Val	Pro	Thr	Val	Leu	Pro 210	
Ser 225	Thr	Leu	Thr	Glu	Leu 230	Tyr	Leu	Tyr	Asn	Asn	Met	Ile	Ala	Lys	Ile 240	
Gln	Glu	Asp	Asp	Phe 245	Asn	Asn	Leu	Asn	Gln 250	Leu	Gln	Ile	Leu	Asp	Leu 255	
Ser	Gly	Asn	Cys 260	Pro	Arg	Cys	Tyr	Asn	Ala 265	Pro	Phe	Pro	Cys	Ala	Pro 270	
Cys	Lys	Asn	Asn 275	Ser	Pro	Leu	Gln	Ile	Pro 280	Val	Asn	Ala	Phe	Asp	Ala 285	
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His	Phe	Leu	Pro 340	Ser	Leu	Ile	Gln	Leu	Asp 345	Leu	Ser	Phe	Asn	Phe	Glu 350	
Leu	Gln	Val	Tyr	Arg	Ala	Ser	Met	Asn	Leu 360	Ser	Gln	Ala	Phe	Ser	Ser 365	
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Leu 385	Lys	Ser	Phe	Asn	Leu 390	Ser	Pro	Leu	His	Asn	Leu	Gln	Asn	Leu	Glu 400	
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Tyr 465	Phe	Arg	Tyr	Asp	Lys 470	Tyr	Ala	Arg	Ser	Cys	Arg	Phe	Lys	Asn	Lys 480	
Glu	Ala	Ser	Phe	Met	Ser	Val	Asn	Glu	Ser 490	Cys	Tyr	Lys	Tyr	Gly	Gln 495	
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Phe	Gln	His	Leu	Ser	Phe	Leu	Lys	Cys	Leu 520	Asn	Leu	Ser	Gly	Asn	Leu 525	
Ile	Ser	Gln	Thr	Leu	Asn	Gly	Ser	Glu	Phe 535	Gln	Pro	Leu	Met	Met	Asn 540	
Asp 545	Asn	Asp	Ile	Ser	Ser	Ser	Thr	Ser	Arg 555	Thr	Met	Glu	Ser	Glu	Ser 560	
Leu	Arg	Thr	Leu	Glu	Phe	Arg	Gly	Asn	His 570	Leu	Asp	Val	Leu	Trp	Arg 575	
Glu	Gly	Asp	Asn	Arg	Tyr	Leu	Gln	Leu	Phe 585	Lys	Asn	Leu	Leu	Lys	Leu 590	
Glu	Glu	Leu	Asp	Ile	Ser	Lys	Asn	Ser	Leu 600	Ser	Phe	Leu	Pro	Ser	Gly 605	

Val	Phe	Asp	Gly	Met	Pro	Pro	Asn	Leu	Lys	Asn	Leu	Ser	Leu	Ala	Lys
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Asn	Gly	Leu	Lys	Ser	Phe	Ser	Trp	Lys	Lys	Leu	Gln	Cys	Leu	Lys	Asn
625					630					635					640
Leu	Glu	Thr	Leu	Asp	Leu	Ser	His	Asn	Gln	Leu	Thr	Thr	Val	Pro	Glu
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Arg	Leu	Ser	Asn	Cys	Ser	Arg	Ser	Leu	Lys	Asn	Leu	Ile	Leu	Lys	Asn
			660					665				670			
Asn	Gln	Ile	Arg	Ser	Leu	Thr	Lys	Tyr	Phe	Leu	Gln	Asp	Ala	Phe	Gln
		675					680				685				
Leu	Arg	Tyr	Leu	Asp	Leu	Ser	Ser	Asn	Lys	Ile	Gln	Met	Ile	Gln	Lys
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Thr	Ser	Phe	Pro	Glu	Asn	Val	Leu	Asn	Asn	Leu	Lys	Met	Leu	Leu	Leu
705					710					715					720
His	His	Asn	Arg	Phe	Leu	Cys	Thr	Cys	Asp	Ala	Val	Trp	Phe	Val	Trp
				725					730					735	
Trp	Val	Asn	His	Thr	Glu	Val	Thr	Ile	Pro	Tyr	Leu	Ala	Thr	Asp	Val
			740					745					750		
Thr	Cys	Val	Gly	Pro	Gly	Ala	His	Lys	Gly	Gln	Ser	Val	Ile	Ser	Leu
		755					760					765			
Asp	Leu	Tyr	Thr	Cys	Glu	Leu	Asp	Leu	Thr	Asn	Leu	Ile	Leu	Phe	Ser
	770					775					780				
Leu	Ser	Ile	Ser	Val	Ser	Leu	Phe	Leu	Met	Val	Met	Met	Thr	Ala	Ser
785					790					795					800
His	Leu	Tyr	Phe	Trp	Asp	Val	Trp	Tyr	Ile	Tyr	His	Phe	Cys	Lys	Ala
				805					810					815	
Lys	Ile	Lys	Gly	Tyr	Gln	Arg	Leu	Ile	Ser	Pro	Asp	Cys	Cys	Tyr	Asp
			820					825					830		
Ala	Phe	Ile	Val	Tyr	Asp	Thr	Lys	Asp	Pro	Ala	Val	Thr	Glu	Trp	Val
		835					840					845			
Leu	Ala	Glu	Leu	Val	Ala	Lys	Leu	Glu	Asp	Pro	Arg	Glu	Lys	His	Phe
	850					855					860				
Asn	Leu	Cys	Leu	Glu	Glu	Arg	Asp	Trp	Leu	Pro	Gly	Gln	Pro	Val	Leu
865					870					875					880
Glu	Asn	Leu	Ser	Gln	Ser	Ile	Gln	Leu	Ser	Lys	Lys	Thr	Val	Phe	Val
				885					890					895	
Met	Thr	Asp	Lys	Tyr	Ala	Lys	Thr	Glu	Asn	Phe	Lys	Ile	Ala	Phe	Tyr
			900					905					910		
Leu	Ser	His	Gln	Arg	Leu	Met	Asp	Glu	Lys	Val	Asp	Val	Ile	Ile	Leu
		915					920					925			
Ile	Phe	Leu	Glu	Lys	Pro	Phe	Gln	Lys	Ser	Lys	Phe	Leu	Gln	Leu	Arg
		930				935					940				
Lys	Arg	Leu	Cys	Gly	Ser	Ser	Val	Leu	Glu	Trp	Pro	Thr	Asn	Pro	Gln
945					950					955					960
Ala	His	Pro	Tyr	Phe	Trp	Gln	Cys	Leu	Lys	Asn	Ala	Leu	Ala	Thr	Asp
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 <212> PRT
 <213> Homo sapiens

<400> 172															
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Asn	Ile	Ile	Leu	Ile	Ser	Lys	Leu	Leu	Gly	Ala	Arg	Trp	Phe	Pro	Lys
			20					25					30		

Thr	Leu	Pro	Cys	Asp	Val	Thr	Leu	Asp	Val	Pro	Lys	Asn	His	Val	Ile
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Val	Asp	Cys	Thr	Asp	Lys	His	Leu	Thr	Glu	Ile	Pro	Gly	Gly	Ile	Pro
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Thr	Asn	Thr	Thr	Asn	Leu	Thr	Leu	Thr	Ile	Asn	His	Ile	Pro	Asp	Ile
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Ser	Pro	Ala	Ser	Phe	His	Arg	Leu	Asp	His	Leu	Val	Glu	Ile	Asp	Phe
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Arg	Cys	Asn	Cys	Val	Pro	Ile	Pro	Leu	Gly	Ser	Lys	Asn	Asn	Met	Cys
			100					105					110		
Ile	Lys	Arg	Leu	Gln	Ile	Lys	Pro	Arg	Ser	Phe	Ser	Gly	Leu	Thr	Tyr
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Gly	Leu	Pro	Pro	Ser	Leu	Gln	Leu	Leu	Ser	Leu	Glu	Ala	Asn	Asn	Ile
145					150					155					160
Phe	Ser	Ile	Arg	Lys	Glu	Asn	Leu	Thr	Glu	Leu	Ala	Asn	Ile	Glu	Ile
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Ser	Thr	Leu	Thr	Glu	Leu	Tyr	Leu	Tyr	Asn	Asn	Met	Ile	Ala	Lys	Ile
225					230					235					240
Gln	Glu	Asp	Asp	Phe	Asn	Asn	Leu	Asn	Gln	Leu	Gln	Ile	Leu	Asp	Leu
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Ser	Gly	Asn	Cys	Pro	Arg	Cys	Tyr	Asn	Ala	Pro	Phe	Pro	Cys	Ala	Pro
			260					265					270		
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		275					280					285			
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Val	Pro	Pro	Arg	Trp	Phe	Lys	Asn	Ile	Asn	Lys	Leu	Gln	Glu	Leu	Asp
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Leu	Ser	Gln	Asn	Phe	Leu	Ala	Lys	Glu	Ile	Gly	Asp	Ala	Lys	Phe	Leu
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Leu	Lys	Ser	Leu	Lys	Ile	Leu	Arg	Ile	Arg	Gly	Tyr	Val	Phe	Lys	Glu
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Leu	Lys	Ser	Phe	Asn	Leu	Ser	Pro	Leu	His	Asn	Leu	Gln	Asn	Leu	Glu
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Val	Leu	Asp	Leu	Gly	Thr	Asn	Phe	Ile	Lys	Ile	Ala	Asn	Leu	Ser	Met
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Phe	Lys	Gln	Phe	Lys	Arg	Leu	Lys	Val	Ile	Asp	Leu	Ser	Val	Asn	Lys
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Ile	Ser	Pro	Ser	Gly	Asp	Ser	Ser	Glu	Val	Gly	Phe	Cys	Ser	Asn	Ala
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Tyr	Phe	Arg	Tyr	Asp	Lys	Tyr	Ala	Arg	Ser	Cys	Arg	Phe	Lys	Asn	Lys
465					470					475					480
Glu	Ala	Ser	Phe	Met	Ser	Val	Asn	Glu	Ser	Cys	Tyr	Lys	Tyr	Gly	Gln
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Pro	Asn	Leu	Leu	Glu	Leu	Tyr	Leu	Tyr	Asn	Asn	Ile	Ile	Lys	Lys	Ile
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Gln	Glu	Asn	Asp	Phe	Asn	Asn	Leu	Asn	Glu	Leu	Gln	Val	Leu	Asp	Leu
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Leu	Ser	Gln	Asn	Tyr	Leu	Ala	Arg	Glu	Ile	Glu	Glu	Ala	Lys	Phe	Leu
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His	Phe	Leu	Pro	Asn	Leu	Val	Glu	Leu	Asp	Phe	Ser	Phe	Asn	Tyr	Glu
			340					345					350		
Leu	Gln	Val	Tyr	His	Ala	Ser	Ile	Thr	Leu	Pro	His	Ser	Leu	Ser	Ser
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Leu	Glu	Asn	Leu	Lys	Ile	Leu	Arg	Val	Lys	Gly	Tyr	Val	Phe	Lys	Glu
	370						375				380				
Leu	Lys	Asn	Ser	Ser	Leu	Ser	Val	Leu	His	Lys	Leu	Pro	Arg	Leu	Glu
385					390					395					400
Val	Leu	Asp	Leu	Gly	Thr	Asn	Phe	Ile	Lys	Ile	Ala	Asp	Leu	Asn	Ile
			405						410					415	
Phe	Lys	His	Phe	Glu	Asn	Leu	Lys	Leu	Ile	Asp	Leu	Ser	Val	Asn	Lys
			420					425					430		
Ile	Ser	Pro	Ser	Glu	Glu	Ser	Arg	Glu	Val	Gly	Phe	Cys	Pro	Asn	Ala
	435						440					445			
Gln	Thr	Ser	Val	Asp	Arg	His	Gly	Pro	Gln	Val	Leu	Glu	Ala	Leu	His
	450					455					460				
Tyr	Phe	Arg	Tyr	Asp	Glu	Tyr	Ala	Arg	Ser	Cys	Arg	Phe	Lys	Asn	Lys
465					470					475					480
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Asp	Phe	Gln	His	Leu	Ser	Phe	Leu	Lys	Cys	Leu	Asn	Leu	Ser	Gly	Asn
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Thr	Ala	Phe	Glu	Glu	Leu	Gln	Ser	Leu	Glu	Val	Leu	Asp	Leu	Ser	Ser
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Asn	Arg	Tyr	Leu	Asp	Phe	Phe	Lys	Asn	Leu	Phe	Asn	Leu	Glu	Val	Leu
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Asp	Ile	Ser	Arg	Asn	Ser	Leu	Asn	Ser	Leu	Pro	Pro	Glu	Val	Phe	Glu
			660					665					670		
Gly	Met	Pro	Pro	Asn	Leu	Lys	Asn	Leu	Ser	Leu	Ala	Lys	Asn	Gly	Leu
		675					680					685			
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Asn Cys Ser Lys Ser Leu Thr Thr Leu Ile Leu Lys His Asn Gln Ile				
		725		730
Arg Gln Leu Thr Lys Tyr Phe Leu Glu Asp Ala Leu Gln Leu Arg Tyr				
		740		745
Leu Asp Ile Ser Ser Asn Lys Ile Gln Val Ile Gln Lys Thr Ser Phe				
		755		760
Pro Glu Asn Val Leu Asn Asn Leu Glu Met Leu Val Leu His His Asn				
		770		775
Arg Phe Leu Cys Asn Cys Asp Ala Val Trp Phe Val Trp Trp Val Asn				
		785		790
His Thr Asp Val Thr Ile Pro Tyr Leu Ala Thr Asp Val Thr Cys Val				
		805		810
Gly Pro Gly Ala His Lys Gly Gln Ser Val Ile Ser Leu Asp Leu Tyr				
		820		825
Thr Cys Glu Leu Asp Leu Thr Asn Leu Ile Leu Phe Ser Val Ser Ile				
		835		840
Ser Ser Val Leu Phe Leu Met Val Val Met Thr Thr Ser His Leu Phe				
		850		855
Phe Trp Asp Met Trp Tyr Ile Tyr Tyr Phe Trp Lys Ala Lys Ile Lys				
		865		870
Gly Tyr Gln His Leu Gln Ser Met Glu Ser Cys Tyr Asp Ala Phe Ile				
		885		890
Val Tyr Asp Thr Lys Asn Ser Ala Val Thr Glu Trp Val Leu Gln Glu				
		900		905
Leu Val Ala Lys Leu Glu Asp Pro Arg Glu Lys His Phe Asn Leu Cys				
		915		920
Leu Glu Glu Arg Asp Trp Leu Pro Gly Gln Pro Val Leu Glu Asn Leu				
		930		935
Ser Gln Ser Ile Gln Leu Ser Lys Lys Thr Val Phe Val Met Thr Gln				
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Lys Tyr Ala Lys Thr Glu Ser Phe Lys Met Ala Phe Tyr Leu Ser His				
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Gln Arg Leu Leu Asp Glu Lys Val Asp Val Ile Ile Leu Ile Phe Leu				
		980		985
Glu Lys Pro Leu Gln Lys Ser Lys Phe Leu Gln Leu Arg Lys Arg Leu				
		995		1000
Cys Arg Ser Ser Val Leu Glu Trp Pro Ala Asn Pro Gln Ala His Pro				
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Tyr Phe Trp Gln Cys Leu Lys Asn Ala Leu Thr Thr Asp Asn His Val				
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Ala Tyr Ser Gln Met Phe Lys Glu Thr Val				1035
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<210> 176

<211> 66

<212> PRT

<213> Mus musculus

<400> 176

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		20		25
Pro Pro Asn Pro Gln Ala His Pro Tyr Phe Cys Gln Cys Leu Lys Asn				
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50
Thr Val
65

55

60

<210> 177
<211> 54
<212> PRT
<213> Mus musculus

<400> 177
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Val Leu Glu Trp Pro Ala Asn Pro Gln Ala His Pro Tyr Phe Trp Gln
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Cys Leu Lys Asn Ala Leu Thr Thr Asp Asn His Val Ala Tyr Ser Gln
35 40 45
Met Phe Lys Glu Thr Val
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<210> 178
<211> 59
<212> PRT
<213> Mus musculus

<400> 178
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Val Ala Tyr Ser Gln Met Phe Lys Glu Thr Val
50 55

<210> 179
<211> 84
<212> PRT
<213> Mus musculus

<400> 179
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Ser Lys Phe Leu Gln Leu Arg Lys Arg Phe Cys Arg Ser Ser Val Leu
35 40 45
Glu Trp Pro Ala Asn Pro Gln Ala His Pro Tyr Phe Trp Gln Cys Leu
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Lys Glu Thr Val

<210> 180
<211> 25
<212> DNA
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<220>

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<210> 183

<211> 3123

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (0)...(0)

<223> Human TLR8 ORF

<400> 183

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atggttatgt	tggtctgcct	ggctcaccat	ttgttttact	gggatgtttg	gtttatatat	2580
aatgtgtgtt	tagctaagg	aaaaggctac	aggtctcttt	ccacatccca	aactttctat	2640
gatgcttaca	tttcttatga	caccaaagac	gcctctgtta	ctgactgggt	gataaataag	2700
ctgcgttacc	acctgaaga	gagccgagac	aaaaacgttc	tcctttgtct	agaggagagg	2760
gattgggacc	cgggattggc	catcatcgac	aacctcatgc	agagcatcaa	ccaaagcaag	2820
aaaacagtat	ttgttttaac	caaaaaatat	gcaaaaagct	ggaacttta	aacagctttt	2880
tacttggtct	tgcaaggct	aatggatgag	aacatggatg	tgattatatt	tatcctgctg	2940
gagccagtgt	tacagcattc	tcagtatttg	aggctacggc	agcggatctg	taagagctcc	3000
atcctccagt	ggcctgacaa	cccgaaggca	gaaggcttgt	tttggcaaac	tctgagaaat	3060
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tac						3123

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 <211> 1041
 <212> PRT
 <213> Homo sapiens

<400> 184															
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Ser	Tyr	Pro	Cys	Asp	Glu	Lys	Lys	Gln	Asn	Asp	Ser	Val	Ile	Ala	Glu
		35					40					45			
Cys	Ser	Asn	Arg	Arg	Leu	Gln	Glu	Val	Pro	Gln	Thr	Val	Gly	Lys	Tyr
		50				55					60				
Val	Thr	Glu	Leu	Asp	Leu	Ser	Asp	Asn	Phe	Ile	Thr	His	Ile	Thr	Asn
65					70					75				80	
Glu	Ser	Phe	Gln	Gly	Leu	Gln	Asn	Leu	Thr	Lys	Ile	Asn	Leu	Asn	His
			85						90					95	
Asn	Pro	Asn	Val	Gln	His	Gln	Asn	Gly	Asn	Pro	Gly	Ile	Gln	Ser	Asn
			100					105					110		
Gly	Leu	Asn	Ile	Thr	Asp	Gly	Ala	Phe	Leu	Asn	Leu	Lys	Asn	Leu	Arg
		115					120					125			
Glu	Leu	Leu	Leu	Glu	Asp	Asn	Gln	Leu	Pro	Gln	Ile	Pro	Ser	Gly	Leu
		130				135					140				
Pro	Glu	Ser	Leu	Thr	Glu	Leu	Ser	Leu	Ile	Gln	Asn	Asn	Ile	Tyr	Asn
145					150					155				160	
Ile	Thr	Lys	Glu	Gly	Ile	Ser	Arg	Leu	Ile	Asn	Leu	Lys	Asn	Leu	Tyr
			165						170					175	

Leu	Ala	Trp	Asn	Cys	Tyr	Phe	Asn	Lys	Val	Cys	Glu	Lys	Thr	Asn	Ile	
			180					185					190			
Glu	Asp	Gly	Val	Phe	Glu	Thr	Leu	Thr	Asn	Leu	Glu	Leu	Leu	Ser	Leu	
		195					200					205				
Ser	Phe	Asn	Ser	Leu	Ser	His	Val	Pro	Pro	Lys	Leu	Pro	Ser	Ser	Leu	
	210					215					220					
Arg	Lys	Leu	Phe	Leu	Ser	Asn	Thr	Gln	Ile	Lys	Tyr	Ile	Ser	Glu	Glu	
225					230					235					240	
Asp	Phe	Lys	Gly	Leu	Ile	Asn	Leu	Thr	Leu	Leu	Asp	Leu	Ser	Gly	Asn	
			245						250					255		
Cys	Pro	Arg	Cys	Phe	Asn	Ala	Pro	Phe	Pro	Cys	Val	Pro	Cys	Asp	Gly	
		260						265					270			
Gly	Ala	Ser	Ile	Asn	Ile	Asp	Arg	Phe	Ala	Phe	Gln	Asn	Leu	Thr	Gln	
	275						280					285				
Leu	Arg	Tyr	Leu	Asn	Leu	Ser	Ser	Thr	Ser	Leu	Arg	Lys	Ile	Asn	Ala	
	290					295					300					
Ala	Trp	Phe	Lys	Asn	Met	Pro	His	Leu	Lys	Val	Leu	Asp	Leu	Glu	Phe	
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Asn	Tyr	Leu	Val	Gly	Glu	Ile	Ala	Ser	Gly	Ala	Phe	Leu	Thr	Met	Leu	
			325						330					335		
Pro	Arg	Leu	Glu	Ile	Leu	Asp	Leu	Ser	Phe	Asn	Tyr	Ile	Lys	Gly	Ser	
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Tyr	Pro	Gln	His	Ile	Asn	Ile	Ser	Arg	Asn	Phe	Ser	Lys	Leu	Leu	Ser	
	355						360					365				
Leu	Arg	Ala	Leu	His	Leu	Arg	Gly	Tyr	Val	Phe	Gln	Glu	Leu	Arg	Glu	
	370					375					380					
Asp	Asp	Phe	Gln	Pro	Leu	Met	Gln	Leu	Pro	Asn	Leu	Ser	Thr	Ile	Asn	
385					390					395					400	
Leu	Gly	Ile	Asn	Phe	Ile	Lys	Gln	Ile	Asp	Phe	Lys	Leu	Phe	Gln	Asn	
			405						410					415		
Phe	Ser	Asn	Leu	Glu	Ile	Ile	Tyr	Leu	Ser	Glu	Asn	Arg	Ile	Ser	Pro	
		420						425					430			
Leu	Val	Lys	Asp	Thr	Arg	Gln	Ser	Tyr	Ala	Asn	Ser	Ser	Ser	Phe	Gln	
	435						440					445				
Arg	His	Ile	Arg	Lys	Arg	Arg	Ser	Thr	Asp	Phe	Glu	Phe	Asp	Pro	His	
	450					455					460					
Ser	Asn	Phe	Tyr	His	Phe	Thr	Arg	Pro	Leu	Ile	Lys	Pro	Gln	Cys	Ala	
465					470					475					480	
Ala	Tyr	Gly	Lys	Ala	Leu	Asp	Leu	Ser	Leu	Asn	Ser	Ile	Phe	Phe	Ile	
			485						490					495		
Gly	Pro	Asn	Gln	Phe	Glu	Asn	Leu	Pro	Asp	Ile	Ala	Cys	Leu	Asn	Leu	
		500						505				510				
Ser	Ala	Asn	Ser	Asn	Ala	Gln	Val	Leu	Ser	Gly	Thr	Glu	Phe	Ser	Ala	
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Ile	Pro	His	Val	Lys	Tyr	Leu	Asp	Leu	Thr	Asn	Asn	Arg	Leu	Asp	Phe	
	530					535					540					
Asp	Asn	Ala	Ser	Ala	Leu	Thr	Glu	Leu	Ser	Asp	Leu	Glu	Val	Leu	Asp	
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Leu	Ser	Tyr	Asn	Ser	His	Tyr	Phe	Arg	Ile	Ala	Gly	Val	Thr	His	His	
			565						570					575		
Leu	Glu	Phe	Ile	Gln	Asn	Phe	Thr	Asn	Leu	Lys	Val	Leu	Asn	Leu	Ser	
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His	Asn	Asn	Ile	Tyr	Thr	Leu	Thr	Asp	Lys	Tyr	Asn	Leu	Glu	Ser	Lys	
	595						600					605				
Ser	Leu	Val	Glu	Leu	Val	Phe	Ser	Gly	Asn	Arg	Leu	Asp	Ile	Leu	Trp	
	610					615					620					
Asn	Asp	Asp	Asp	Asn	Arg	Tyr	Ile	Ser	Ile	Phe	Lys	Gly	Leu	Lys	Asn	
625					630					635					640	
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Thr Lys Lys

5

10

15

<210> 186
<211> 1041
<212> PRT
<213> Homo sapiens

<400> 186

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			20					25					30		
Ser	Tyr	Pro	Cys	Asp	Glu	Lys	Lys	Gln	Asn	Asp	Ser	Val	Ile	Ala	Glu
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Cys	Ser	Asn	Arg	Arg	Leu	Gln	Glu	Val	Pro	Gln	Thr	Val	Gly	Lys	Tyr
	50					55					60				
Val	Thr	Glu	Leu	Asp	Leu	Ser	Asp	Asn	Phe	Ile	Thr	His	Ile	Thr	Asn
65					70					75					80
Glu	Ser	Phe	Gln	Gly	Leu	Gln	Asn	Leu	Thr	Lys	Ile	Asn	Leu	Asn	His
			85						90					95	
Asn	Pro	Asn	Val	Gln	His	Gln	Asn	Gly	Asn	Pro	Gly	Ile	Gln	Ser	Asn
			100					105					110		
Gly	Leu	Asn	Ile	Thr	Asp	Gly	Ala	Phe	Leu	Asn	Leu	Lys	Asn	Leu	Arg
		115					120					125			
Glu	Leu	Leu	Leu	Glu	Asp	Asn	Gln	Leu	Pro	Gln	Ile	Pro	Ser	Gly	Leu
	130					135					140				
Pro	Glu	Ser	Leu	Thr	Glu	Leu	Ser	Leu	Ile	Gln	Asn	Asn	Ile	Tyr	Asn
145					150					155					160
Ile	Thr	Lys	Glu	Gly	Ile	Ser	Arg	Leu	Ile	Asn	Leu	Lys	Asn	Leu	Tyr
			165						170					175	
Leu	Ala	Trp	Asn	Cys	Tyr	Phe	Asn	Lys	Val	Cys	Glu	Lys	Thr	Asn	Ile
			180					185					190		
Glu	Asp	Gly	Val	Phe	Glu	Thr	Leu	Thr	Asn	Leu	Glu	Leu	Leu	Ser	Leu
	195						200					205			
Ser	Phe	Asn	Ser	Leu	Ser	His	Val	Pro	Pro	Lys	Leu	Pro	Ser	Ser	Leu
	210					215					220				
Arg	Lys	Leu	Phe	Leu	Ser	Asn	Thr	Gln	Ile	Lys	Tyr	Ile	Ser	Glu	Glu
225					230					235					240
Asp	Phe	Lys	Gly	Leu	Ile	Asn	Leu	Thr	Leu	Leu	Asp	Leu	Ser	Gly	Asn
			245						250					255	
Cys	Pro	Arg	Cys	Phe	Asn	Ala	Pro	Phe	Pro	Cys	Val	Pro	Cys	Asp	Gly
			260					265					270		
Gly	Ala	Ser	Ile	Asn	Ile	Asp	Arg	Phe	Ala	Phe	Gln	Asn	Leu	Thr	Gln
	275						280					285			
Leu	Arg	Tyr	Leu	Asn	Leu	Ser	Thr	Ser	Leu	Arg	Lys	Ile	Asn	Ala	
	290					295					300				
Ala	Trp	Phe	Lys	Asn	Met	Pro	His	Leu	Lys	Val	Leu	Asp	Leu	Glu	Phe
305					310					315					320
Asn	Tyr	Leu	Val	Gly	Glu	Ile	Ala	Ser	Gly	Ala	Phe	Leu	Thr	Met	Leu
			325						330					335	
Pro	Arg	Leu	Glu	Ile	Leu	Asp	Leu	Ser	Phe	Asn	Tyr	Ile	Lys	Gly	Ser
		340						345					350		
Tyr	Pro	Gln	His	Ile	Asn	Ile	Ser	Arg	Asn	Phe	Ser	Lys	Leu	Leu	Ser
	355					360						365			
Leu	Arg	Ala	Leu	His	Leu	Arg	Gly	Tyr	Val	Phe	Gln	Glu	Leu	Arg	Glu
	370					375					380				
Asp	Asp	Phe	Gln	Pro	Leu	Met	Gln	Leu	Pro	Asn	Leu	Ser	Thr	Ile	Asn

385					390					395				400	
Leu	Gly	Ile	Asn	Phe	Ile	Lys	Gln	Ile	Asp	Phe	Lys	Leu	Phe	Gln	Asn
				405					410					415	
Phe	Ser	Asn	Leu	Glu	Ile	Ile	Tyr	Leu	Ser	Glu	Asn	Arg	Ile	Ser	Pro
			420					425					430		
Leu	Val	Lys	Asp	Thr	Arg	Gln	Ser	Tyr	Ala	Asn	Ser	Ser	Ser	Phe	Gln
		435					440					445			
Arg	His	Ile	Arg	Lys	Arg	Arg	Ser	Thr	Asp	Phe	Glu	Phe	Asp	Pro	His
	450					455					460				
Ser	Asn	Phe	Tyr	His	Phe	Thr	Arg	Pro	Leu	Ile	Lys	Pro	Gln	Cys	Ala
465					470					475					480
Ala	Tyr	Gly	Lys	Ala	Leu	Asp	Leu	Ser	Leu	Asn	Ser	Ile	Phe	Phe	Ile
			485						490					495	
Gly	Pro	Asn	Gln	Phe	Glu	Asn	Leu	Pro	Asp	Ile	Ala	Cys	Leu	Asn	Leu
		500						505					510		
Ser	Ala	Asn	Ser	Asn	Ala	Gln	Val	Leu	Ser	Gly	Thr	Glu	Phe	Ser	Ala
		515					520					525			
Ile	Pro	His	Val	Lys	Tyr	Leu	Asp	Leu	Thr	Asn	Asn	Arg	Leu	Asp	Phe
	530					535					540				
Asp	Asn	Ala	Ser	Ala	Leu	Thr	Glu	Leu	Ser	Asp	Leu	Glu	Val	Leu	Asp
545					550					555					560
Leu	Ser	Tyr	Asn	Ser	His	Tyr	Phe	Arg	Ile	Ala	Gly	Val	Thr	His	His
			565						570					575	
Leu	Glu	Phe	Ile	Gln	Asn	Phe	Thr	Asn	Leu	Lys	Val	Leu	Asn	Leu	Ser
		580						585					590		
His	Asn	Asn	Ile	Tyr	Thr	Leu	Thr	Asp	Lys	Tyr	Asn	Leu	Glu	Ser	Lys
		595					600					605			
Ser	Leu	Val	Glu	Leu	Val	Phe	Ser	Gly	Asn	Arg	Leu	Asp	Ile	Leu	Trp
	610					615					620				
Asn	Asp	Asp	Asp	Asn	Arg	Tyr	Ile	Ser	Ile	Phe	Lys	Gly	Leu	Lys	Asn
625					630					635					640
Leu	Thr	Arg	Leu	Asp	Leu	Ser	Leu	Asn	Arg	Leu	Lys	His	Ile	Pro	Asn
			645						650					655	
Glu	Ala	Phe	Leu	Asn	Leu	Pro	Ala	Ser	Leu	Thr	Glu	Leu	His	Ile	Asn
		660						665					670		
Asp	Asn	Met	Leu	Lys	Phe	Phe	Asn	Trp	Thr	Leu	Leu	Gln	Gln	Phe	Pro
	675						680						685		
Arg	Leu	Glu	Leu	Leu	Asp	Leu	Arg	Gly	Asn	Lys	Leu	Leu	Phe	Leu	Thr
	690					695					700				
Asp	Ser	Leu	Ser	Asp	Phe	Thr	Ser	Ser	Leu	Arg	Thr	Leu	Leu	Leu	Ser
705					710					715					720
His	Asn	Arg	Ile	Ser	His	Leu	Pro	Ser	Gly	Phe	Leu	Ser	Glu	Val	Ser
			725						730					735	
Ser	Leu	Lys	His	Leu	Asp	Leu	Ser	Ser	Asn	Leu	Leu	Lys	Thr	Ile	Asn
		740						745					750		
Lys	Ser	Ala	Leu	Glu	Thr	Lys	Thr	Thr	Lys	Leu	Ser	Met	Leu	Glu	
	755						760				765				
Leu	His	Gly	Asn	Pro	Phe	Glu	Cys	Thr	Cys	Asp	Ile	Gly	Asp	Phe	Arg
	770					775					780				
Arg	Trp	Met	Asp	Glu	His	Leu	Asn	Val	Lys	Ile	Pro	Arg	Leu	Val	Asp
785					790					795					800
Val	Ile	Cys	Ala	Ser	Pro	Gly	Asp	Gln	Arg	Gly	Lys	Ser	Ile	Val	Ser
			805						810					815	
Leu	Glu	Leu	Thr	Thr	Cys	Val	Ser	Asp	Val	Thr	Ala	Val	Ile	Leu	Phe
			820					825					830		
Phe	Phe	Thr	Phe	Phe	Ile	Thr	Thr	Met	Val	Met	Leu	Ala	Ala	Leu	Ala
	835						840				845				
His	His	Leu	Phe	Tyr	Trp	Asp	Val	Trp	Phe	Ile	Tyr	Asn	Val	Cys	Leu
	850					855					860				

Ala	Lys	Val	Lys	Gly	Tyr	Arg	Ser	Leu	Ser	Thr	Ser	Gln	Thr	Phe	Tyr
865					870					875					880
Asp	Ala	Tyr	Ile	Ser	Tyr	Asp	Thr	Lys	Asp	Ala	Ser	Val	Thr	Asp	Trp
				885					890						895
Val	Ile	Asn	Glu	Leu	Arg	Tyr	His	Leu	Glu	Glu	Ser	Arg	Asp	Lys	Asn
			900					905					910		
Val	Leu	Leu	Cys	Leu	Glu	Glu	Arg	Asp	Trp	Asp	Pro	Gly	Leu	Ala	Ile
		915					920					925			
Ile	Asp	Asn	Leu	Met	Gln	Ser	Ile	Asn	Gln	Ser	Lys	Lys	Thr	Val	Phe
	930					935					940				
Val	Leu	Thr	Lys	Lys	Tyr	Ala	Lys	Ser	Trp	Asn	Phe	Lys	Thr	Ala	Phe
945					950					955					960
Tyr	Leu	Ala	Leu	Gln	Arg	Leu	Met	Asp	Glu	Asn	Met	Asp	Val	Ile	Ile
			965					970						975	
Phe	Ile	Leu	Leu	Glu	Pro	Val	Leu	Gln	His	Ser	Gln	Tyr	Leu	Arg	Leu
			980					985					990		
Arg	Gln	Arg	Ile	Cys	Lys	Ser	Ser	Ile	Leu	Gln	Trp	Pro	Asp	Asn	Pro
		995					1000					1005			
Lys	Ala	Glu	Gly	Leu	Phe	Trp	Gln	Thr	Leu	Arg	Asn	Val	Val	Leu	Thr
	1010					1015					1020				
Glu	Asn	Asp	Ser	Arg	Tyr	Asn	Asn	Met	Tyr	Val	Asp	Ser	Ile	Lys	Gln
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Tyr															

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 <212> PRT
 <213> Homo sapiens

<400> 187															
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			20					25					30		
Phe	Leu	Leu	Ile	Ser	Gly	Ser	Cys	Glu	Leu	Cys	Ala	Glu	Glu	Asn	Phe
		35				40					45				
Ser	Arg	Ser	Tyr	Pro	Cys	Asp	Glu	Lys	Lys	Gln	Asn	Asp	Ser	Val	Ile
	50					55					60				
Ala	Glu	Cys	Ser	Asn	Arg	Arg	Leu	Gln	Glu	Val	Pro	Gln	Thr	Val	Gly
65					70					75					80
Lys	Tyr	Val	Thr	Glu	Leu	Asp	Leu	Ser	Asp	Asn	Phe	Ile	Thr	His	Ile
			85						90					95	
Thr	Asn	Glu	Ser	Phe	Gln	Gly	Leu	Gln	Asn	Leu	Thr	Lys	Ile	Asn	Leu
			100					105					110		
Asn	His	Asn	Pro	Asn	Val	Gln	His	Gln	Asn	Gly	Asn	Pro	Gly	Ile	Gln
		115					120					125			
Ser	Asn	Gly	Leu	Asn	Ile	Thr	Asp	Gly	Ala	Phe	Leu	Asn	Leu	Lys	Asn
	130					135					140				
Leu	Arg	Glu	Leu	Leu	Leu	Glu	Asp	Asn	Gln	Leu	Pro	Gln	Ile	Pro	Ser
145					150					155					160
Gly	Leu	Pro	Glu	Ser	Leu	Thr	Glu	Leu	Ser	Leu	Ile	Gln	Asn	Asn	Ile
			165						170					175	
Tyr	Asn	Ile	Thr	Lys	Glu	Gly	Ile	Ser	Arg	Leu	Ile	Asn	Leu	Lys	Asn
		180						185					190		
Leu	Tyr	Leu	Ala	Trp	Asn	Cys	Tyr	Phe	Asn	Lys	Val	Cys	Glu	Lys	Thr
	195						200					205			
Asn	Ile	Glu	Asp	Gly	Val	Phe	Glu	Thr	Leu	Thr	Asn	Leu	Glu	Leu	Leu
210						215					220				

Ser	Leu	Ser	Phe	Asn	Ser	Leu	Ser	His	Val	Ser	Pro	Lys	Leu	Pro	Ser
225					230					235					240
Ser	Leu	Arg	Lys	Leu	Phe	Leu	Ser	Asn	Thr	Gln	Ile	Lys	Tyr	Ile	Ser
				245					250					255	
Glu	Glu	Asp	Phe	Lys	Gly	Leu	Ile	Asn	Leu	Thr	Leu	Leu	Asp	Leu	Ser
			260					265					270		
Gly	Asn	Cys	Pro	Arg	Cys	Phe	Asn	Ala	Pro	Phe	Pro	Cys	Val	Pro	Cys
	275						280					285			
Asp	Gly	Gly	Ala	Ser	Ile	Asn	Ile	Asp	Arg	Phe	Ala	Phe	Gln	Asn	Leu
290						295				300					
Thr	Gln	Leu	Arg	Tyr	Leu	Asn	Leu	Ser	Ser	Thr	Ser	Leu	Arg	Lys	Ile
305					310					315					320
Asn	Ala	Ala	Trp	Phe	Lys	Asn	Met	Pro	His	Leu	Lys	Val	Leu	Asp	Leu
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			340					345					350		
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	355						360					365			
Gly	Ser	Tyr	Pro	Gln	His	Ile	Asn	Ile	Ser	Arg	Asn	Phe	Ser	Lys	Pro
370						375					380				
Leu	Ser	Leu	Arg	Ala	Leu	His	Leu	Arg	Gly	Tyr	Val	Phe	Gln	Glu	Leu
385					390					395					400
Arg	Glu	Asp	Asp	Phe	Gln	Pro	Leu	Met	Gln	Leu	Pro	Asn	Leu	Ser	Thr
				405					410					415	
Ile	Asn	Leu	Gly	Ile	Asn	Phe	Ile	Lys	Gln	Ile	Asp	Phe	Lys	Leu	Phe
			420					425					430		
Gln	Asn	Phe	Ser	Asn	Leu	Glu	Ile	Ile	Tyr	Leu	Ser	Glu	Asn	Arg	Ile
	435						440					445			
Ser	Pro	Leu	Val	Lys	Asp	Thr	Arg	Gln	Ser	Tyr	Ala	Asn	Ser	Ser	Ser
	450					455					460				
Phe	Gln	Arg	His	Ile	Arg	Lys	Arg	Arg	Ser	Thr	Asp	Phe	Glu	Phe	Asp
465					470					475					480
Pro	His	Ser	Asn	Phe	Tyr	His	Phe	Thr	Arg	Pro	Leu	Ile	Lys	Pro	Gln
				485					490					495	
Cys	Ala	Ala	Tyr	Gly	Lys	Ala	Leu	Asp	Leu	Ser	Leu	Asn	Ser	Ile	Phe
			500					505					510		
Phe	Ile	Gly	Pro	Asn	Gln	Phe	Glu	Asn	Leu	Pro	Asp	Ile	Ala	Cys	Leu
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Ser	Ala	Ile	Pro	His	Val	Lys	Tyr	Leu	Asp	Leu	Thr	Asn	Asn	Arg	Leu
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Asp	Phe	Asp	Asn	Ala	Ser	Ala	Leu	Thr	Glu	Leu	Ser	Asp	Leu	Glu	Val
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	610					615					620				
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Leu	Trp	Asn	Asp	Asp	Asp	Asn	Arg	Tyr	Ile	Ser	Ile	Phe	Lys	Gly	Leu
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Lys	Asn	Leu	Thr	Arg	Leu	Asp	Leu	Ser	Leu	Asn	Arg	Leu	Lys	His	Ile
			660					665					670		
Pro	Asn	Glu	Ala	Phe	Leu	Asn	Leu	Pro	Ala	Ser	Leu	Thr	Glu	Leu	His
	675						680					685			
Ile	Asn	Asp	Asn	Met	Leu	Lys	Phe	Phe	Asn	Trp	Thr	Leu	Leu	Gln	Gln

690		695		700											
Phe	Pro	Arg	Leu	Glu	Leu	Leu	Asp	Leu	Arg	Gly	Asn	Lys	Leu	Leu	Phe
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Leu	Thr	Asp	Ser	Leu	Ser	Asp	Phe	Thr	Ser	Ser	Leu	Arg	Thr	Leu	Leu
				725					730						735
Leu	Ser	His	Asn	Arg	Ile	Ser	His	Leu	Pro	Ser	Gly	Phe	Leu	Ser	Glu
				740				745					750		
Val	Ser	Ser	Leu	Lys	His	Leu	Asp	Leu	Ser	Ser	Asn	Leu	Leu	Lys	Thr
				755			760					765			
Ile	Asn	Lys	Ser	Ala	Leu	Glu	Thr	Lys	Thr	Thr	Thr	Lys	Leu	Ser	Met
				770			775					780			
Leu	Glu	Leu	His	Gly	Asn	Pro	Phe	Glu	Cys	Thr	Cys	Asp	Ile	Gly	Asp
785					790					795					800
Phe	Arg	Arg	Trp	Met	Asp	Glu	His	Leu	Asn	Val	Lys	Ile	Pro	Arg	Leu
				805					810						815
Val	Asp	Val	Ile	Cys	Ala	Ser	Pro	Gly	Asp	Gln	Arg	Gly	Lys	Ser	Ile
				820				825					830		
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				835			840					845			
Leu	Phe	Phe	Phe	Thr	Phe	Phe	Ile	Thr	Thr	Met	Val	Met	Leu	Ala	Ala
				850			855					860			
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Cys	Leu	Ala	Lys	Ile	Lys	Gly	Tyr	Arg	Ser	Leu	Ser	Thr	Ser	Gln	Thr
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Phe	Tyr	Asp	Ala	Tyr	Ile	Ser	Tyr	Asp	Thr	Lys	Asp	Ala	Ser	Val	Thr
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Lys	Asn	Val	Leu	Leu	Cys	Leu	Glu	Glu	Arg	Asp	Trp	Asp	Pro	Gly	Leu
				930			935				940				
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Val	Phe	Val	Leu	Thr	Lys	Lys	Tyr	Ala	Lys	Ser	Trp	Asn	Phe	Lys	Thr
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Ala	Phe	Tyr	Leu	Ala	Leu	Gln	Arg	Leu	Met	Asp	Glu	Asn	Met	Asp	Val
				980				985					990		
Ile	Ile	Phe	Ile	Leu	Leu	Glu	Pro	Val	Leu	Gln	His	Ser	Gln	Tyr	Leu
				995			1000						1005		
Arg	Leu	Arg	Gln	Arg	Ile	Cys	Lys	Ser	Ser	Ile	Leu	Gln	Trp	Pro	Asp
				1010			1015					1020			
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Leu	Thr	Glu	Asn	Asp	Ser	Arg	Tyr	Asn	Asn	Met	Tyr	Val	Asp	Ser	Ile
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Lys	Gln	Tyr													

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 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide

<400> 188
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cctgtttttac	tgggatgttt	ggtttatcta	tcacatgtgc	tctgctaagt	taaaaggcta	2640
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<211> 3096

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

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<223> Murine TLR8 ORF

<400> 191

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cacaactccc	ttgtgattgc	agaatgcaac	catcgtcaac	tgcatgaagt	tccccaaact	180
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gagtcctttc	aaaagctgca	aaacctcact	aaaatcgatc	tgaaccacaa	tgccaaacaa	300
cagcacccaa	atgaaaataa	aatgggtatg	aatattacag	aaggggcact	tctcagccta	360
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 <211> 1032
 <212> PRT
 <213> Mus musculus

<400> 192															
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Ser	Tyr	Pro	Cys	Asp	Glu	Ile	Arg	His	Asn	Ser	Leu	Val	Ile	Ala	Glu
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Cys	Asn	His	Arg	Gln	Leu	His	Glu	Val	Pro	Gln	Thr	Ile	Gly	Lys	Tyr
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Val	Thr	Asn	Ile	Asp	Leu	Ser	Asp	Asn	Ala	Ile	Thr	His	Ile	Thr	Lys
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Glu	Ser	Phe	Gln	Lys	Leu	Gln	Asn	Leu	Thr	Lys	Ile	Asp	Leu	Asn	His
			85						90					95	
Asn	Ala	Lys	Gln	Gln	His	Pro	Asn	Glu	Asn	Lys	Asn	Gly	Met	Asn	Ile
			100					105					110		
Thr	Glu	Gly	Ala	Leu	Leu	Ser	Leu	Arg	Asn	Leu	Thr	Val	Leu	Leu	Leu
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Glu	Asp	Asn	Gln	Leu	Tyr	Thr	Ile	Pro	Ala	Gly	Leu	Pro	Glu	Ser	Leu
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Lys	Glu	Leu	Ser	Leu	Ile	Gln	Asn	Asn	Ile	Phe	Gln	Val	Thr	Lys	Asn
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Asn	Thr	Phe	Gly	Leu	Arg	Asn	Leu	Glu	Arg	Leu	Tyr	Leu	Gly	Trp	Asn
			165						170					175	
Cys	Tyr	Phe	Lys	Cys	Asn	Gln	Thr	Phe	Lys	Val	Glu	Asp	Gly	Ala	Phe
			180					185					190		
Lys	Asn	Leu	Ile	His	Leu	Lys	Val	Leu	Ser	Leu	Ser	Phe	Asn	Asn	Leu
		195					200					205			
Phe	Tyr	Val	Pro	Pro	Lys	Leu	Pro	Ser	Ser	Leu	Arg	Lys	Leu	Phe	Leu
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Ser	Asn	Ala	Lys	Ile	Met	Asn	Ile	Thr	Gln	Glu	Asp	Phe	Lys	Gly	Leu
225					230					235					240

Glu	Asn	Leu	Thr	Leu	Leu	Asp	Leu	Ser	Gly	Asn	Cys	Pro	Arg	Cys	Tyr		
				245					250					255			
Asn	Ala	Pro	Phe	Pro	Cys	Thr	Pro	Cys	Lys	Glu	Asn	Ser	Ser	Ile	His		
			260					265					270				
Ile	His	Pro	Leu	Ala	Phe	Gln	Ser	Leu	Thr	Gln	Leu	Leu	Tyr	Leu	Asn		
		275						280				285					
Leu	Ser	Ser	Thr	Ser	Leu	Arg	Thr	Ile	Pro	Ser	Thr	Trp	Phe	Glu	Asn		
	290					295					300						
Leu	Ser	Asn	Leu	Lys	Glu	Leu	His	Leu	Glu	Phe	Asn	Tyr	Leu	Val	Gln		
305				310						315					320		
Glu	Ile	Ala	Ser	Gly	Ala	Phe	Leu	Thr	Lys	Leu	Pro	Ser	Leu	Gln	Ile		
				325					330					335			
Leu	Asp	Leu	Ser	Phe	Asn	Phe	Gln	Tyr	Lys	Glu	Tyr	Leu	Gln	Phe	Ile		
		340						345					350				
Asn	Ile	Ser	Ser	Asn	Phe	Ser	Lys	Leu	Arg	Ser	Leu	Lys	Lys	Leu	His		
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	370					375					380						
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385				390						395					400		
Ile	Glu	Lys	Ile	Asp	Phe	Lys	Ala	Phe	Gln	Asn	Phe	Ser	Lys	Leu	Asp		
				405					410					415			
Val	Ile	Tyr	Leu	Ser	Gly	Asn	Arg	Ile	Ala	Ser	Val	Leu	Asp	Gly	Thr		
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Asp	Tyr	Ser	Ser	Trp	Arg	Asn	Arg	Leu	Arg	Lys	Pro	Leu	Ser	Thr	Asp		
		435					440					445					
Asp	Asp	Glu	Phe	Asp	Pro	His	Val	Asn	Phe	Tyr	His	Ser	Thr	Lys	Pro		
	450					455					460						
Leu	Ile	Lys	Pro	Gln	Cys	Thr	Ala	Tyr	Gly	Lys	Ala	Leu	Asp	Leu	Ser		
465				470						475					480		
Leu	Asn	Asn	Ile	Phe	Ile	Ile	Gly	Lys	Ser	Gln	Phe	Glu	Gly	Phe	Gln		
				485					490					495			
Asp	Ile	Ala	Cys	Leu	Asn	Leu	Ser	Phe	Asn	Ala	Asn	Thr	Gln	Val	Phe		
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Thr	Asn	Asn	Arg	Leu	Asp	Phe	Asp	Asp	Asn	Asn	Ala	Phe	Ser	Asp	Leu		
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Ile	Ala	Gly	Val	Thr	His	Arg	Leu	Gly	Phe	Ile	Gln	Asn	Leu	Ile	Asn		
				565					570					575			
Leu	Arg	Val	Leu	Asn	Leu	Ser	His	Asn	Gly	Ile	Tyr	Thr	Leu	Thr	Glu		
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Glu	Ser	Glu	Leu	Lys	Ser	Ile	Ser	Leu	Lys	Glu	Leu	Val	Phe	Ser	Gly		
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Asn	Arg	Leu	Asp	His	Leu	Trp	Asn	Ala	Asn	Asp	Gly	Lys	Tyr	Trp	Ser		
	610					615					620						
Ile	Phe	Lys	Ser	Leu	Gln	Asn	Leu	Ile	Arg	Leu	Asp	Leu	Ser	Tyr	Asn		
625				630						635					640		
Asn	Leu	Gln	Gln	Ile	Pro	Asn	Gly	Ala	Phe	Leu	Asn	Leu	Pro	Gln	Ser		
				645					650					655			
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		660						665					670				
Thr	Leu	Leu	Gln	Tyr	Phe	Pro	His	Leu	His	Leu	Leu	Asp	Leu	Ser	Arg		
		675					680					685					
Asn	Glu	Leu	Tyr	Phe	Leu	Pro	Asn	Cys	Leu	Ser	Lys	Phe	Ala	His	Ser		
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Leu	Glu	Thr	Leu	Leu	Leu	Ser	His	Asn	His	Phe	Ser	His	Leu	Pro	Ser		

				85					90					95			
Asp	Leu	Thr	Thr	Cys	Val	Ser	Asp	Thr	Thr	Ala	Ala	Val	Leu	Phe	Phe		
				100					105					110			
Leu	Thr	Phe	Leu	Thr	Thr	Ser	Met	Val	Met	Leu	Ala	Ala	Leu	Val	His		
				115				120					125				
His	Leu	Phe	Tyr	Trp	Asp	Val	Trp	Phe	Ile	Tyr	His	Met	Cys	Ser	Ala		
				130			135				140						
Lys	Leu	Lys	Gly	Tyr	Arg	Thr	Ser	Ser	Thr	Ser	Gln	Thr	Phe	Tyr	Asp		
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Ala	Tyr	Ile	Ser	Tyr	Asp	Thr	Lys	Asp	Ala	Ser	Val	Thr	Asp	Trp	Val		
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 <223> Synthetic oligonucleotide

<400> 194
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<210> 195
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 <213> Artificial Sequence

<220>
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29

<210> 196
 <211> 16
 <212> PRT
 <213> Unknown

<220>
 <223> Unknown

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<210> 197
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 <212> PRT
 <213> Homo sapiens

Gly	Asn	Cys	Arg	Arg	Cys	Asp	His	Ala	Pro	Asn	Pro	Cys	Met	Glu	Cys
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 <211> 16

<212> PRT
 <213> Mus musculus

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 <210> 199
 <211> 16
 <212> PRT
 <213> Homo sapiens

 <400> 199
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 <210> 200
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 <212> PRT
 <213> Mus musculus

 <400> 200
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 <210> 201
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 <212> PRT
 <213> Homo sapiens

 <400> 201
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 <210> 202
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 <212> PRT
 <213> Mus musculus

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 <210> 203
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 <213> Homo sapiens

 <400> 203
 Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Asp Xaa Leu Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Xaa Xaa Lys Leu Xaa Xaa Xaa Xaa Xaa Xaa Ser
 20 25 30

 <210> 204
 <211> 31
 <212> PRT
 <213> Mus musculus

<400> 204
 Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Asp Xaa Leu Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Xaa Ser Leu Xaa Xaa Xaa Xaa Xaa Ser
 20 25 30

<210> 205
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<400> 205
 Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Asp Xaa Asp Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Xaa Asp Leu Xaa Xaa Xaa Xaa Xaa Tyr
 20 25 30

<210> 206
 <211> 31
 <212> PRT
 <213> Mus musculus

<400> 206
 Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Asp Xaa Asp Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Xaa Xaa Asp Leu Xaa Xaa Xaa Xaa Xaa His
 20 25 30

<210> 207
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<220>
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<400> 207
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<210> 208
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<220>
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<400> 208
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<210> 209
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<220>
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<400> 209
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27

<210> 210
 <211> 31
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<400> 210
 Gln Val Leu Asp Leu Ser Arg Asn Lys Leu Asp Leu Tyr His Glu His
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 Ser Phe Thr Glu Leu Pro Arg Leu Glu Ala Leu Asp Leu Ser Tyr
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<210> 211
 <211> 31
 <212> PRT
 <213> Mus musculus

<400> 211
 Gln Val Leu Asp Leu Ser His Asn Lys Leu Asp Leu Tyr His Trp Lys
 1 5 10 15
 Ser Phe Ser Glu Leu Pro Gln Leu Gln Ala Leu Asp Leu Ser Tyr
 20 25 30

<210> 212
 <211> 31
 <212> PRT
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<400> 212
 Arg Tyr Leu Asp Phe Ser Asn Asn Arg Leu Asp Leu Leu His Ser Thr
 1 5 10 15
 Ala Phe Glu Glu Leu His Lys Leu Glu Val Leu Asp Ile Ser Ser
 20 25 30

<210> 213
 <211> 31
 <212> PRT
 <213> Mus musculus

<400> 213
 Arg Tyr Leu Asp Phe Ser Asn Asn Arg Leu Asp Leu Leu Tyr Ser Thr
 1 5 10 15
 Ala Phe Glu Glu Leu Gln Ser Leu Glu Val Leu Asp Leu Ser Ser
 20 25 30

<210> 214
 <211> 31
 <212> PRT
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<400> 214
 Lys Tyr Leu Asp Leu Thr Asn Asn Arg Leu Asp Phe Asp Asn Ala Ser
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 Ala Leu Thr Glu Leu Ser Asp Leu Glu Val Leu Asp Leu Ser Tyr

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 <211> 31
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 <400> 215
 Lys Tyr Leu Asp Leu Thr Asn Asn Arg Leu Asp Phe Asp Asp Asn Asn
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 <400> 217
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 <210> 218
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 <400> 218
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 <210> 219
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 <210> 220
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<212> PRT
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Ser

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<220>
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<210> 222
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<220>
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<400> 222
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34

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<400> 223
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<210> 224
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<220>
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<400> 224
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38

<210> 225
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<213> Artificial Sequence
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 <223> Synthetic oligonucleotide
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 <211> 41
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 <223> Synthetic oligonucleotide
 <400> 229
 tatatgcggc cgcccacccat ggaaaacatg ttccttcagt c 41
 <210> 230
 <211> 38
 <212> DNA
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 <223> Synthetic oligonucleotide

<400> 230
tatatgcggc cgccatctga aacacaagtt gttagctc

38